

REMARKS

In view of the above amendments and the following remarks, Applicant requests favorable reconsideration and allowance of the above-identified application.

Claims 84-93 remain pending in this application, with Claims 84, 86 and 91 being independent. By this Amendment, Applicant has amended each of the independent claims.

Applicant notes that Claims 84-93 stand rejected under the judicially created doctrine of double patenting over Claims 1-84 of U.S. Patent No. 6,020,894. Applicant requests that any requirement for a Terminal Disclaimer be held in abeyance until there is otherwise allowable subject matter in this case.

Claims 84-93 stand rejected under 35 U.S.C. § 103 over U.S. Patent No. 4,679,038 (Bantz, et al.) in view of U.S. Patent No. 4,862,154 (Gonzalez-Lopez). Applicant traverses this rejection.

As recited in independent Claim 84, Applicant's invention is directed to a method of creating an image formed as a plurality of bands, each of which represents an independently displayable portion of the image. Multiple passes over the bands are used to manipulate the image. Each of the bands is stored as independent compressed image data

such that each of the bands is configured for independent manipulation.

As recited in independent Claim 86, Applicant's invention is directed to a method of creating an image formed as a plurality of bands or sections, with each of the bands representing an independently displayable portion of the image. The method includes a step of storing the bands as independently compressed image data, and editing the image by affecting multiple passes over the bands. Each of the bands is configured for independent editing.

As recited in independent Claim 91, Applicant's invention is also directed to a method of creating an image. The method includes a step of rendering a band of image data forming a corresponding band of the image, with the band representing an independently displayable portion of the image. In addition, the method includes compressing the band of image data to form a corresponding independent compressed band, and storing the corresponding independent compressed band.

Thus, the invention, as set forth in each of the above-discussed independent claims, involves compressing bands representing independently displayable portions of an image.

The Bantz, et al. patent is directed to a band buffer display system. The Office Action acknowledges, and

Applicant submits, that this patent does not describe the compression of image data as claimed in the present invention. More specifically, Applicant submits that the bands described in the Bantz, et al. patent are not compressed to a reduce size of the image data because each band is 1/K of the original pixel size of the image. Further, compression would require CPU intervention prior to the data being loaded into the band buffer. Applicant understands the Bantz, et al. patent as using an operation similar to a DMA (direct memory access) memory-to-memory move operation, which would not require intervention by a CPU. Therefore, Applicant does not believe that there is even a suggestion in the Bantz, et al. patent regarding the compression of image data as set forth in the claims of the present application.

Applicant also submits that the Bantz, et al. patent teaches away from the compression of image data. That patent states that the disclosed invention "is based on the concept of a repetitious copy operation, done at full refreshed rates, from an image memory to a band buffer" (col. 8, lines 19-22). If such a system used compression or decompression of image data, the process of providing a copy operation at full refresh rates would be hindered. Thus, there would be no motivation to use a compression feature with the system described in that patent.

In the outstanding Office Action, the Gonzalez-Lopez patent is now also applied against the claims of the present invention. That patent is directed to combining image and graphic data in a high-performance raster graphics work station. The Office Action cites that patent as describing storing an image in compressed form to reduce the required memory. The Gonzalez-Lopez patent teaches that color images usually consists of three or more bands, and that the bands most often correspond to three primary colors (red, green and blue). In other cases, that patent indicates that the bands may be associated with physical parameters, such as texture or the like. Accordingly, the term band used in the Gonzalez-Lopez patent generally refers to a primary color component of an image.

Further, the Gonzalez-Lopez patent teaches a method in which each color component is coded as an 8 bit word per pixel, and 24 bits per pixel are required to represent the original image. As shown in Figure 2, compression is used to code the 24 bit original image data into a 12 bit frame buffer word. Therefore, one band of image data contains the color component information for one entire image. Further, each band of color component information for the image must be compressed and expanded to get three 8 bit words in order to display the image (see column 4, lines 54 and 55). Because three 8 bit words are required in order to display

the image, each band of color component information for the image must be compressed and expanded substantially simultaneously.

In view the requirements for the system set forth in the Gonzalez-Lopez patent, Applicant submits that the system does not use bands representing an independently displayable portion of an image, and thus compression of such bands is not described. Therefore, Applicant submits that image editing on a band by band basis would not be available in the system described in that patent, unlike the present invention.

Accordingly, Applicant submits that the Bantz, et al. and Gonzalez-Lopez patents, taken alone or in combination, fail to disclose or suggest at least the features of creating an image formed as a plurality of bands (or sections), with each of the bands representing an independently displayable portion of the image and with each of the bands stored as independently compressed image data, as recited in independent Claims 84 and 86. In addition, Applicant also submits that those patents, taken alone or in combination, fail to disclose or suggest at least the features of rendering a band of image data forming a corresponding band of an image, the band representing and independently displayable portion of the image, and compressing the band of image data to form a corresponding

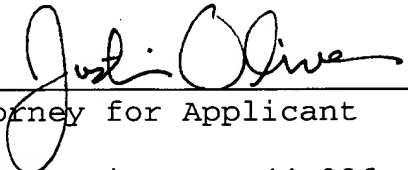
independent compressed band, as recited in independent Claim 91.

For the foregoing reasons, Applicant submits that the independent claims are distinguishable over the applied documents, whether those documents are taken alone or in combination, and requests withdrawal of the rejection under 35 U.S.C. § 103.

The remaining claims in the present application are dependent claims which depend from the independent claims discussed above, and thus are patentable over the documents of record for reasons noted above with respect to those independent claims. In addition, each recites features of the invention still further distinguishing it from the applied documents. Applicant requests favorable and independent consideration thereof.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



Attorney for Applicant
Registration No. 44,986

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

JJO/tmm

[VERSIONS WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

Sub P1 / 1 84. (Amended) A method of creating an image characterized in that the image is formed as a plurality of bands, with each of the bands representing an independently displayable portion of the image, in which multiple passes over the bands are used to manipulate the image, and wherein each of the bands [being] is stored as independent compressed image data such that each of the bands is configured for independent manipulation.

C2 / 3 86. (Amended) A method of creating an image formed as a plurality of bands or sections, with each of the bands representing an independently displayable portion of the image, said method comprising the steps of:

- (a) storing each of the bands as independently compressed image data; and
- (b) editing the image by effecting multiple passes over the bands, whereby each of the bands is configured for independent editing.

Sub
F1 8 91. (Amended) A method of creating an image, said
method comprising the steps of:

(a) rendering a band of image data forming a
corresponding band of the image, the band representing an
independently displayable portion of the image;

C3 (b) compressing the band of image data to form a
corresponding independent compressed band[.];

(c) storing the corresponding independent
compressed band; and

(d) repeating steps (a) to (c) for each remaining
band of the image thereby resulting in the image being formed
of a plurality of stored bands of compressed image data.